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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,028	01/28/2002	Todd D. Fortenberry	TI-32323	4906

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EXAMINER	
HAILU, TADESSE	

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/060,028	FORTENBERRY ET AL.	
	Examiner	Art Unit	
	Tadesse Hailu	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,9-15 and 17-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9-15 and 17-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the AMENDMENT submitted on Feb 18, 2005 for the patent application number 10/060,028, filed on January 28, 2002.

2. The pending claims 1-5, 9-15 and 17-22 are examined herein as follows:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 9-15 and 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Child et al (US Pub No 2003/0041078).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With regard to claim 1:

Child discloses a method of displaying a sequence of steps (Figs 2a –2o) in a mathematical derivation (Figs 2a –2o) on a display screen of a handheld computing device (graphical calculator 10, Fig. 1), the sequence of steps comprising a plurality of objects (e.g., x^2 –s.x-4, (x-4).x=1)=0, Figs 2a –2o) and a plurality of transformations (e.g., add –4 to each side, factor left hand side, Figs 2a –2o), wherein the method comprises:

displaying at least one transformation (e.g., add –4 to each side, factor left hand side, Figs 2a –2o) on the display screen (Fig. 2, 100); and

displaying at least a portion of at least one object (e.g., x^2 –s.x-4, (x-4). x=1)=0, Figs 2a –2o) on the display screen (Fig. 2, 100), wherein an upper bound (e.g., horizontal or vertical upper bound, Figs. 2n –2o) is enforced on the display height (see the downward arrow indicator in Fig. J) of the object.

With regard to claim 12:

Child further discloses a handheld computing device (10) comprising a display screen (100) capable of displaying mathematical expressions (Figs. 2a-2o), the display screen including a cursor (paragraph 5);

a key panel (Fig. 1) having keys at least capable of selecting positions (paragraphs 5, 15 and 21) of the cursor and moving the cursor horizontally or vertically on the display screen (paragraphs 5, 15 and 21);

a memory (14) for storing at least algorithm; and

a processor (13) for executing the algorithm, wherein the algorithm comprises a

method of displaying a sequence of steps (Figs. 2a-2o) in manipulating mathematical equations on the display screen, the sequence of steps comprising a plurality of objects (e.g., x^2 –s.x-4, (x-4).x=1)=0, Figs 2a –2o) and a plurality of transformations (e.g., add –4 to each side , factor left hand side, Figs 2a –2o), wherein the method comprises displaying at least one transformation (e.g., add –4 to each side , factor left hand side, Figs 2a –2o) on the display screen (100), and displaying at least a portion of at least one object (e.g., x^2 –s.x-4, (x-4).x=1)=0, Figs 2a –2o) on the display screen (100), wherein an upper bound (e.g., vertical or horizontal upper bound, Fig. 2n or 2o) is enforced on the display height (see the downward arrow indicator in Fig. J) of the object.

With regard to claims 2 and 13:

Child further discloses that an object subjected to the upper bound (Figs. 2n –2o) is partially truncated (see the arrow indicator, Figs. 2n –2o) from view on the display screen, further comprising: displaying an arrow (see the arrow indicator, Figs. 2n –2o) to indicate the object truncated portions, wherein a user of the handheld computer device can select the arrow to view the object truncated portions indicator (paragraph 15).

With regard to claims 3 and 14:

Child further discloses said arrow points towards the truncated portions of the object (Figs. 2n –2o).

With regard to claims 4 and 15:

Child further discloses that the user can scroll (e.g., via one of the arrows, Figs 2b and 2l) the object, independent of scrolling the entire display screen, to view the entire object.

With regard to claims 5 and 17:

One of the calculators disclosed in both the current invention and Child is T1-89 handheld calculator, wherein the upper bound pixels for T1-89 is less than 160 x 100 pixels (see T1-89, Fig. 1, paragraph 11).

With regard to claims 9 and 18:

Child further discloses that the object is a mathematical expression (e.g., Figs 2a –2o).

With regard to claims 10 and 19:

Child further discloses manipulating the mathematical expression comprises a mathematical derivation (e.g., powers, polynomial expressions, etc, Figs. 2a-2o).

With regard to claim 11:

Child further discloses displaying a menu bar, displaying a problem statement line, and displaying a status line on the display screen (see e.g., Figs. 2a-2o).

With regard to claim 20:

Child further discloses that the object comprises constants, variables, functions, algebraic expressions, or combinations thereof (e.g., see the objects in Figs. 2a-2o).

With regard to claim 21:

Child further discloses manipulating the mathematical expression comprises simplifying expressions and/or solving equations (e.g., see the mathematical expressions in Figs. 2a-2o).

With regard to claim 22:

The hand held calculator of Child further comprises a menu bar, a problem statement line, and a status line displayed on the display screen (e.g., see the display screen in Figs. 2a-2o).

Response to Arguments

4. Applicant's arguments filed Feb 18, 2005 have been fully considered but they are not persuasive. Applicant argues that the limitations of independent claim 1, that is,

> "A method for a handheld computing device including the steps of displaying at least one transformation on a display screen, and displaying at least a portion of at least one object on the display screen, wherein an upper bound is enforced on the display height of the object. This novel combination is neither shown nor suggested by Child et al. "

In contrast to the Applicant's argument, Child discloses the claimed subject matter of claim 1. To begin with, Child and the current invention are directed to the same invention, that is, manipulating mathematical expression on a small hand held computing device. Child discloses a method of displaying a sequence of steps (Figs 2a –2o) in a mathematical derivation (Figs 2a –2o) on a display screen of a handheld computing device (graphical calculator 10, Fig. 1), the sequence of steps comprising a plurality of objects (e.g., x^2 –s.x-4, (x-4).x=1)=0, Figs 2a –2o) and a plurality of

transformations (e.g., add –4 to each side, factor left hand side, Figs 2a –2o), wherein the method comprises:

displaying at least one transformation (e.g., add –4 to each side, factor left hand side, Figs 2a –2o) on the display screen (Fig. 2, 100); and

displaying at least a portion of at least one object (e.g., x^2 –s.x-4, (x-4). x=1)=0, Figs 2a –2o) on the display screen (Fig. 2, 100), wherein an upper bound (e.g., horizontal and/or vertical upper bound, Figs. 2n –2o) is enforced on the display height of the object. Independent claim 12 includes similar limitations with claim 1, thus, Child discloses the argued subject matter of claim 12.

The Applicant particularly argues that "Child et al. merely shows horizontal truncation, and neither shows or suggests enforcing on the display height of an object being viewed an upper bound, and requiring the display of at least one transformation on the display screen, so as to allow users to keep track of the problem being solved."

Again, in contrast to the Applicant's argument, the claimed horizontal transformation (e.g., add –4 to each side, factor left hand side, Figs 2a –2o) is clearly disclosed by Child. Child also disclosed enforcing on the display height (see the downward arrow indicator in Fig. J) of an object being viewed an upper bound (horizontal and/or vertical). Child also discloses a status menu 110 comprising up, down, left and right contextual arrow indicators (Figs. 2b, 2j, and 2l) associated with the displayed data.

Interestingly, the applicant states "While Figures 2n and 2o show horizontal truncation of an object on a screen in which a transformation is also displayed, this is by

happenstance." The Examiner strongly disagrees because one cannot simply disclose his/her invention due to chance, happenchance or happenstance, it takes an inventor. Thus, Child's invention as described in Figures 2n to 2o showing horizontal truncation of an object on a screen in which a transformation is also displayed is NOT by **happenstance** .

Having fully addressed the Applicant's arguments, the rejection still stands.

CONCLUSION

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (571) 272-4051. The Examiner can normally be reached on M-F from 10:00 - 630 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (571) 272-4048 Art Unit 2173.

8. An inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Examiner Tadesse Hailu
Art Unit 2173
3/28/05